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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,828	02/02/2006	Willi Kessel	043048/293374 5181	
BANK OF AMERICA PLAZA SINGI			IINER	
			SINGH, SUNIL	
	101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000		ART UNIT	PAPER NUMBER
			MAIL DATE	DELIVERY MODE
			10/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/538,828	KESSEL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Sunil <sup>*</sup> Singh	3673				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
	action is non-final.					
3) Since this application is in condition for allowan	· · · · · · · · · · · · · · · · · · ·					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	·					
4)⊠ Claim(s) <u>1,3,5 and 6</u> is/are pending in the appli	cation.	•				
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1, 3 and 5-6</u> is/are rejected.						
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restriction and/or	election requirement.	•				
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the o	•					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
		•				
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>	4) Linterview Summary (PTO-413) Paper No(s)/Mail Date					
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal Patent Application					
Paper No(s)/Mail Date <u>6/18/07</u> . 6) Other:						

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1,3,5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward et al. or Merriman (US 4146271, 5029943) in view of British document (GB 2265652).

Ward et al. and Merriman both disclose a longwall support control comprising a central control system (22, 28), plurality of control units (20,23), mining shield control device, at least one bus line (23, see Fig. 3), code word (see col. 6 line 5+, col. 4 line 60 thru col. 5 line 5). Ward and Merriman both disclose the invention substantially as claimed. However, they both lack multichannel radio transceiver on each mining shield control device and linking them to a portable control device. British document teaches multichannel radio transceiver (34, 46, see Figs. 3,4) on each mining shield control device and linking them to a portable control device(12,32,42). It would have been considered obvious to one of ordinary skill in the art to modify either Ward et al. or Merriman to include multichannel radio transceiver on each mining shield control device and linking them to a portable control device as taught. British document '652 in order to individually access information of selected devices.

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3. Claims 1,3,5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over British document (GB 2167924) in view of British document (GB 2265652).

British document '924 discloses a longwall support control comprising a central control system (see Figures), plurality of control units (see Figures), mining shield control device, at least one bus line (see Figures), code word (see abstract). British document '924 discloses the invention substantially as claimed. However, British document '924 lacks multichannel radio transceiver on each mining shield control device and linking them to a portable control device. British document '652 teaches multichannel radio transceiver (34, 46, see Figs. 3,4) on each mining shield control device and linking them to a portable control device(12,32,42). It would have been considered obvious to one of ordinary skill in the art to modify British document '924 to include multichannel radio transceiver on each mining shield control device and linking them to a portable control device as taught British document '652 in order to individually access information of selected devices.

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## Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (571) 272-7051. The examiner can normally be reached on Monday through Friday 10:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sunil Singh Primary Examiner Art Unit 3673

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